REMARKS

Status of Claims:

Claims 1-7 remain cancelled. New claims 14-16 are added. Thus, claims 8-16 are present for examination.

Claim Rejection:

Claims 8-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant Admitted Prior Art (AAPA) in further view of Leung (U.S. Patent Number 5,645,434).

With respect to claims 8-13, as amended, the rejection is respectfully traversed.

Independent claim 8, as amended, recites a USB interface by which an electrical/electronic product can be connected to a general peripheral device, said USB interface comprising:

> "a USB connector for receiving a USB signal from the electrical/electronic product,
>
> a single conversion circuit for converting the USB signal into an external interface signal that is transmitted to the general peripheral device,
>
> a **selector** connected between said USB connector and said conversion circuit and **responsive to a status signal**;
>
> at least one external interface connector for transmitting the external interface signal to the general peripheral device, and
>
> at least one expansion connector for directly connecting to at least one other expansion connector of a second USB interface without a cable connected therebetween, said status signal indicating whether said at least one expansion connector is connected to said at least one other expansion connector;
>
> wherein said **selector** is configured to transmit said USB signal received from the USB connector to the second USB interface and to **not transmit the USB signal directly to the conversion circuit** when said status signal indicates that said at least one expansion connector **is connected** to said at least one other expansion connector; and

> wherein said **selector** is configured to transmit said USB signal received from the USB connector **directly to the conversion circuit** when said status signal indicates that said at least one expansion connector **is not connected** to said at least one other expansion connector." (Emphasis Added).

A USB interface including the above-quoted features has at least the advantage that a **selector** is connected between a USB connector and a conversion circuit and is **responsive to a status signal**. The status signal indicates whether at least one expansion connector of the USB interface is connected to at least one other expansion connector of a second USB interface. Also, the selector is configured to transmit a USB signal received from the USB connector **directly to the conversion circuit** when the status signal indicates that the at least one expansion connector **is not connected** to the at least one other expansion connector. In addition, the selector is configured to transmit the USB signal received from the USB connector **to the second USB interface** and **to not transmit the USB signal directly to the conversion circuit** when the status signal indicates that the at least one expansion connector **is connected** to the at least one other expansion connector. (Specification; page 15, line 5 to page 16, line 11; FIG. 7).

Advantages of such a USB interface are described in the specification at pages 15-16 with reference to FIG. 7. As explained in the example on page 15, lines 8-16 of the specification, if a USB interface (e.g. USB unit 1-1) is **individually** connected to an electrical/electronic product 2 and to a peripheral device 22-1, a USB signal from the electrical/electronic device 2 is transmitted from a selector 13-1 **directly to** a conversion circuit 7-1 as shown by a **signal path 28-1**. (Applicant's FIG. 7). On the other hand, as explained in the example on page 15, line 17 to page 16, line 11 of the specification, if the USB interface (e.g. USB unit 1-1) is **integrally** connected with a second USB interface (e.g. USB unit 12-1), the USB signal from the electrical/electronic product 2 is transmitted through the selector 13-1 to the second USB interface 12-1 as illustrated by **signal path 29-1**, and the selector 13-1 **does not transmit** the USB signal **directly to** the conversion circuit 7-1. (Applicant's FIG. 7).

Thus, in the example illustrated in FIG. 7, the selector 13-1 allows for selecting between the signal path 28-1 and the signal path 29-1 based on whether or not the USB unit 1-1 is connected to the USB unit 12-1. Some advantages of being able to select between the two signal paths include: (i) being able to connect the USB unit 1-1 **individually** to the electrical/electronic product 2 and still have the USB signal sent to the conversion circuit 7-1, so that if only the single USB unit 1-1 is needed, other units do not have to be connected, which reduces size, weight, and hardware; and (ii) being able to connect USB units together (e.g. 1-1 and 12-1) and then to connect any one of the USB units (e.g. 1-1) to the electrical/electronic product 2 and have USB signals sent between the USB units and not directly to the conversion circuit 7-1 so that, for example, a USB hub in one of the units (e.g. 11-1 of unit 12-1) can transmit the USB signal to an appropriate conversion circuit of one of the **integrally** connected USB units. (Specification; page 15, line 5 to page 16, line 11; FIG. 7).

Neither AAPA nor Leung, alone or in combination, disclose or suggest a USB interface including the above-quoted features with a **selector** connected between a USB connector and a conversion circuit and **responsive to a status signal**, where the **selector** is configured: (i) to transmit a USB signal received from the USB connector to a second USB interface and to **not transmit the USB signal directly to the conversion circuit** when the status signal indicates that at least one expansion connector of the USB interface **is connected** to at least one other expansion connector of the second USB interface; and (ii) to transmit the USB signal received from the USB connector **directly to the conversion circuit** when the status signal indicates that the at least one expansion connector **is not connected** to the at least one other expansion connector.

With respect to FIG. 9 of AAPA, the Examiner points to: (i) element 104 as disclosing a USB connector; (ii) the conversion circuit 106-1 as disclosing a conversion circuit; (iii) the USB_HUB 105 as disclosing a selector; and (iv) the USB cable 103 as disclosing at least one expansion connector.

However, in the system of AAPA, **even when** the USB cable 103 connects the external USB connector 110 to the exterior type USB unit 108, a USB signal that is input at

the element 104 and that is destined for the peripheral equipment 107-1 is **still sent from the USB_HUB 105 directly to the conversion circuit 106-1**. This is evident from the function of the USB_HUB 105, which is to transmit a USB signal that is destined for the peripheral equipment 107-1 **directly to** the conversion circuit 106-1 **regardless of whether or not** the exterior type USB unit 108 is connected to the external USB connector 110 by the USB cable 103.

As a consequence, the system of AAPA does **not** satisfy the claim limitation, "wherein said **selector** is configured to transmit said USB signal received from the USB connector to the second USB interface and to **not transmit the USB signal directly to the conversion circuit** when said status signal indicates that said at least one expansion connector **is connected** to said at least one other expansion connector". (Emphasis Added). Furthermore, Leung does **not** cure the deficiency with respect to the teaching of AAPA, because Leung similarly does **not** teach a USB interface with a **selector** meeting the claim limitations.

Therefore, independent claim 8, as amended, is neither disclosed nor suggested by the cited prior art and, hence, is believed to be allowable. The Patent Office has not made out a *prima facie* case of obviousness under 35 U.S.C. 103. New dependent claim 14 depends from independent claim 8 and recites, among other features, that the second USB interface comprises a second single conversion circuit. New dependent claim 15 depends from independent claim 8 and recites, among other features, that the second USB interface comprises a hub.

Independent claim 12, as amended, recites a USB interface device with features similar to features of a USB interface of independent claim 8 and, thus, is believed to be allowable for at least the same reasons that independent claim 8 is believed to be allowable.

New independent claim 16 recites a separate type USB unit with features similar to features of a USB interface of independent claim 8 and, thus, is believed to be allowable for at least the same reasons that independent claim 8 is believed to be allowable.

The dependent claims are deemed allowable for at least the same reasons indicated above with regard to the independent claims from which they depend.

Conclusion:

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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